

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

|                                   |   |            |
|-----------------------------------|---|------------|
| ELECTRONIC APPLICATION OF MADISON | ) | CASE NO.   |
| COUNTY UTILITIES DISTRICT FOR AN  | ) | 2021-00218 |
| ALTERNATIVE RATE ADJUSTMENT       | ) |            |

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of November 22, 2021, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's July 8, 2021 Order, Madison County Utilities District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report. The Commission directs Madison District to the Commission's July 22, 2021 Order in Case No. 2020-00085<sup>1</sup> regarding filings with the Commission.



Linda C. Bridwell, PE  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED DEC 03 2021

cc: Parties of Record

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<sup>1</sup> Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

STAFF REPORT  
ON  
MADISON COUNTY UTILITIES DISTRICT  
CASE NO. 2021-00218

Madison County Utilities District (Madison District) is a water utility organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 10,712 residential customers, 672 commercial customers, 3 industrial customers, and 21 public authority customers that reside in Madison County, Kentucky.<sup>1</sup> As part of the final Order of Case Number 2020-00178, Madison District was ordered to file for an a general adjustment to rates or alternative rate filing within one year of the date of the final Order.<sup>2</sup> On May 24, 2021, Madison District tendered an application, pursuant to 807 KAR 5:076, requesting to adjust its water service rates. The Commission notified Madison District by letter dated June 8, 2021, that its application was rejected for failure to satisfy the minimum filing requirements set forth in certain Commission regulations. Madison District subsequently cured the filing deficiencies, and its application was deemed filed as of June 23, 2021. On October 11, 2021, the Commission granted Madison District additional time to respond to Commission Staff's First Request for Information. Upon review of the responses and consideration of the delay to this case caused by the issues related to the installation of broadband fiber optic, on November 22, 2021, the Commission removed the issue of the installation of

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<sup>1</sup> *Annual Report of Madison District to the Public Service Commission for the Calendar Year Ended December 31, 2020* (2020 Annual Report) at 12 and 49.

<sup>2</sup> Case No. 2020-00178, *Electronic Purchased Water Adjustment Filing of Madison County Utility District* (Ky. PSC June 23, 2020).

broadband fiber optic cable in the system owned by Madison District from this case and altered its procedural schedule to reflect a due date for the Commission Staff Report of December 3, 2021.

The Commission notes that in its 2020 Annual Report, Madison District reported a water loss of 9.24 percent.<sup>3</sup> Commission regulation 807 KAR 5:066(6)(3) states that for ratemaking purposes, a utility's water loss shall not exceed 15 percent of total water produced and purchased, excluding water consumed by a utility in its own operations. At a 9.24 percent water loss, the annual cost to Madison District is \$252,379.<sup>4</sup>

To comply with the requirements of 807 KAR 5:076, Section 9,<sup>5</sup> Madison District used the calendar year ended December 31, 2020, as the basis for its application. Using its pro forma test-year operations, Madison District determined that a revenue increase of \$1,732,437, or 35.84 percent, over test-year normalized revenues of \$4,833,323 was warranted.<sup>6</sup> Madison District states that the utility was requesting a 10 percent increase, not the full 35.84 percent because they believed that 10 percent was adequate enough to allow the utility to maintain the current level of service and it was the more equitable

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<sup>3</sup> 2020 Annual Report at 57.

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|                                    |                    |                              |
|------------------------------------|--------------------|------------------------------|
|                                    | Purchased<br>Water | Purchased<br>Power - Pumping |
| Test-Year Expense                  | \$ 2,706,627       | \$ 24,755                    |
| Multiply By: Water Loss Percentage | <u>9.24%</u>       | <u>9.24%</u>                 |
| Test-Year Cost                     | <u>\$ 250,092</u>  | <u>\$ 2,287</u>              |
| Total Test-Year Cost of Water Loss |                    | <u><u>\$ 252,379</u></u>     |

<sup>5</sup> The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measureable changes, that coincides with the reporting period of the applicant's annual report for the immediate past year.

<sup>6</sup> Application, Revenue Requirements Calculation.

and less burdensome for its customers.<sup>7</sup> The rates requested by Madison District would increase the monthly bill of a typical customer using 527 cubic feet per month by \$3.08 from \$30.69 to \$33.77, or approximately 10 percent.

|   |                     |
|---|---------------------|
| Operating Expenses                              | \$ 5,477,970        |
| Add: Average Annual Debt Principal and Interest | 583,374             |
| Additional Working Capital                      | <u>692,511</u>      |
| Overall Revenue Requirement                     | 6,753,855           |
| Less: Other Operating Revenue                   | <u>(188,095)</u>    |
| Revenue Requirement - Water Rates               | 6,565,760           |
| Less: Normalized Revenue from Service           | <u>(4,833,323)</u>  |
| Required Revenue Increase                       | <u>\$ 1,732,437</u> |
| Percentage Increase                             | <u>35.84%</u>       |

To determine the reasonableness of the rates requested by Madison District, Staff performed a limited financial review of Madison District’s test-year operations. The scope of Staff’s review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable<sup>8</sup> changes to test-year operations were identified and adjustments made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

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<sup>7</sup> Madison District Response to Staff’s Second Request for Information (Staff’s Second Request) (filed Sep. 30, 2021), Item 5.a.

<sup>8</sup> Commission regulation 807 KAR 5:076, Section 9, sets the standard for the determination of the reasonableness of proposed rates and states, in pertinent part, that the test period shall be “adjusted for known and measurable changes.” See also Case No. 2001-00211, *The Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue its Evidence of Indebtedness therefor; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC Mar. 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 25, 2003); Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018).

Staff's findings are summarized in this report. Travis Leach reviewed the calculation of Madison District's Overall Revenue Requirement. Eddie Beavers reviewed Madison District's reported revenues and rate design.

### SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage (DSC) method, as generally accepted by the Commission, Staff found that Madison District's required revenue from rates is \$5,410,540 to meet the Overall Revenue Requirement of \$5,567,094, and that a \$577,217 revenue increase, or 11.94 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Monthly Water Service Rates. Madison District proposed to increase all of its monthly retail water service rates evenly across the board by approximately 10 percent. Madison District has not performed a cost of service study (COSS). Further, Madison District did not provide a response concerning whether they completed a COSS or if there has not been any material change in the water system to warrant a COSS.<sup>9</sup>

The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable and in the absence of a COSS. Finding no such evidence in this case, Staff followed the method proposed by Madison District and allocated the \$577,217 revenue increase across the board to Madison District's monthly water service rates.

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<sup>9</sup> See Madison District's Response to Staff's First Request, Item 4; Madison District's Response to Staff's Second Request, Item 5; Madison District's Response to Staff's Third Request, Item 14.

The rates set forth in Appendix A to this report are based upon the revenue requirement, as calculated by Staff, and will produce sufficient revenues from water sales to recover the \$5,410,540, Revenue Required from Rates, an approximate 11.94 percent increase. These rates will increase a typical residential customer's monthly water bill for the Madison District's customers from \$30.69 to \$34.35, an increase of \$3.66, or approximately 11.91 percent.<sup>10</sup>

3. Nonrecurring Charges. Following the Commission's recent decisions,<sup>11</sup> Staff has reviewed Madison District's nonrecurring charges. The Commission found that as district personnel are currently paid during normal business hours, estimated labor costs previously included in determining the amount of nonrecurring charges should be eliminated from the charges. Staff has reviewed the most recent cost justification information provided in Madison District's Tariff filing, TFS2015-00954, and has adjusted these charges by removing Field Labor Costs and Office/Clerical Labor Costs.<sup>12</sup> Such adjustments result in the following revised nonrecurring charges:

| <u>Nonrecurring Charge</u>        | <u>Normal Hours</u> |
|-----------------------------------|---------------------|
| Meter Re-reading Check Charge     | \$22.00             |
| Meter Test Charge                 | \$61.00             |
| Meter Drop Charge                 | \$151.00            |
| Reconnection Charge               | \$20.00             |
| Reconnection Charge (After Hours) | \$51.00             |
| Returned Check/Bank Draft Charge  | \$17.00             |
| Service Call Charge               | \$20.00             |

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<sup>10</sup> The typical customer uses approximately 527 per 100 cf per month.

<sup>11</sup> Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020); and Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 3, 2020), Case No. 2020-00196, *Electronic Application of West Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020), and Case No. 2020-00195, *Electronic Application of Southeast Daviess County Water District for an Alternative Rate Adjustment*, (Ky. PSC Dec. 30, 2020).

<sup>12</sup> TFS2015-00754, *Tariff Filing of Madison County Utility District* (PSC Letter, Feb. 8, 2016).

Service Call Charge (After Hours) \$51.00

The adjustments to the nonrecurring charges results in a decrease to the charges and an increase to the total revenue requirement of \$35,780 as shown below.<sup>13</sup>

|                                      | Number of<br>Occurrences | Madison District<br>Test Year | Pro Forma<br>Adjustments | Pro Forma |
|--------------------------------------|--------------------------|-------------------------------|--------------------------|-----------|
| Forfeited Discounts:                 |                          |                               |                          |           |
| Late Payment Penalties               |                          | \$66,989                      | \$ -                     | \$66,989  |
| Miscellaneous Service Revenues:      |                          |                               |                          |           |
| Meter Drop Charge                    | 38                       | 6,574                         | (5,738)                  | 836       |
| Reconnection Charge                  | 151                      | 6,342                         | (3,020)                  | 3,322     |
| Reconnection Charge After Hours      | 0                        | 0                             | 0                        | 0         |
| Returned Check/Bank Draft Charge     | 66                       | 1,320                         | (1,122)                  | 198       |
| Service Call Charge                  | 1295                     | 54,390                        | (25,900)                 | 28,490    |
| Total Miscellaneous Service Revenues |                          | \$68,626                      | (35,780)                 | 32,846    |
| Total Other Operating Revenues       |                          | \$135,615                     | (\$35,780)               | \$99,835  |

### PRO FORMA OPERATING STATEMENT

Madison District's Pro Forma Operating Statement for the test year ended December 31, 2020, as determined by Staff, appears below.

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<sup>13</sup> Madison District's Response to Staff's Second Request (filed Sep. 30, 2021), Item 4.

|  | 2020<br>Annual Report | Adjustment | Reference | Pro Forma    |
|--|-----------------------|------------|-----------|--------------|
| Operating Revenues                       |                       |            |           |              |
| Retail Sales of Water                    | \$ 4,833,323          |            |           | \$ 4,833,323 |
| Other Water Revenues                     |                       |            |           |              |
| Late Fees                                | 66,989                |            |           | 66,989       |
| Billing                                  | 106,292               | (106,292)  | (A)       | -            |
| Other                                    | 68,626                | (35,780)   | (B)       | 32,846       |
| Total Other Operating Revenues           | 241,907               | (142,072)  |           | 99,835       |
| Total Operating Revenues                 | 5,075,230             | (142,072)  |           | 4,933,158    |
| Operating Expenses                       |                       |            |           |              |
| Operation and Maintenance Expenses       |                       |            |           |              |
| Salaries & Wages - Employees             | 630,771               | (94,035)   | (C)       | 536,736      |
| Salaries & Wages - Officers              | 18,000                |            |           | 18,000       |
| Employee Pensions and Benefits           | 469,154               | 4,415      | (D)       | 473,569      |
| Purchased Water                          | 2,706,627             |            |           | 2,706,627    |
| Purchased Power                          | 52,742                |            |           | 52,742       |
| Contractual Services Engineering         | 20,783                |            |           | 20,783       |
| Contractual Services - Accounting        | 34,801                |            |           | 34,801       |
| Contractual Services - Other             | 743                   | 9,642      | (E)       | 10,385       |
| Transportation Expenses                  | 44,153                |            |           | 44,153       |
| Insurance - General Liability            | 39,347                |            |           | 39,347       |
| Insurance - Worker's Compensation        | 9,714                 |            |           | 9,714        |
| Advertising Expense                      | 89                    |            |           | 89           |
| Maintenance & Repairs                    | -                     | 78,507     | (E)       | 78,507       |
| Materials & Supplies                     | -                     | 4,228      | (E)       | 4,228        |
| Office Expense                           | -                     | 140,225    | (E)       | 140,225      |
| Dues, Fees, Taxes & Licenses             | -                     | 26,170     | (E)       | 26,170       |
| Miscellaneous Expenses                   | 286,010               | 45,913     | (E)       |              |
|  |                       | (11,607)   | (E)       |              |
|  |                       | (9,642)    | (E)       |              |
|  |                       | (26,170)   | (E)       |              |
|  |                       | (140,225)  | (E)       |              |
|  |                       | (48,010)   | (E)       |              |
|  |                       | (4,228)    | (E)       |              |
|  |                       | (78,507)   | (E)       | 13,534       |
| Total Operation and Maintenance Expenses | 4,312,934             | (103,324)  |           | 4,209,610    |
| Depreciation Expense                     | 554,893               | (70,931)   | (F)       | 483,962      |
| Taxes Other Than Income                  | -                     | 48,010     | (E)       |              |
|  |                       | (10,373)   | (C)       | 37,637       |
| Total Operating Expenses                 | 4,867,827             | (136,618)  |           | 4,731,209    |
| Utility Operating Income                 | \$ 207,403            | \$ (5,454) |           | \$ 201,949   |

In its application, Madison District proposed to increase a number of test-year expenses by a flat 5 percent increase to address year-over-year increase in the cost of operation. Staff does not find that the adjustments have the necessary basis to qualify as known and measurable. Therefore, Staff does not recommend applying the increases proposed by Madison District.

A. Billing Revenues. Madison District included test-year revenues of \$106,292 related to billing services performed on the behalf of North Madison County Sewer District and Kirksville Water Association. Historically, the Commission has disallowed such revenues, and therefore Staff has reduced Billing Revenues by \$106,292.

B. Nonrecurring Charges. As shown above, the adjustments to the nonrecurring charges results in a decrease in Other Operating Revenue of \$35,780.

C. Salaries and Wages – Employees & FICA. In the test-year, Madison District included \$630,771 to Salaries and Wages - Employees Expense. Staff normalized Salaries and Wages using 2020 hours worked and pay rate as of August 1, 2021, and found that a total expense of \$536,736 is appropriate for pro forma operations. Therefore, Staff has reduced Salaries and Wages - Employees expense by \$94,035, as shown below.

| <u>Employee Title</u>           | <u>Pro Forma Hours Worked</u> | <u>Pro Forma Overtime Hours</u> | <u>Pro Form Hourly Rate</u> | <u>Pro Forma Wages</u> |
|---------------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| Manager                         | 2080                          |                                 | \$ 31.51                    | \$ 65,541              |
| Supervisor                      | 2080                          |                                 | 19.94                       | 41,475                 |
| Asst. Supervisor                | 2080                          | 187                             | 16.00                       | 37,768                 |
| Field Staff                     | 2080                          | 121                             | 14.67                       | 33,176                 |
| Field Staff                     | 2080                          | 155                             | 14.23                       | 32,907                 |
| Field Staff                     | 2080                          | 81                              | 10.83                       | 23,842                 |
| Field Staff                     | 2080                          | 151                             | 14.00                       | 32,291                 |
| Field Staff                     | 2080                          | 74                              | 10.83                       | 23,729                 |
| Office Field Asst.              | 2080                          | 21                              | 14.20                       | 29,983                 |
| Office manager                  | 2080                          |                                 | 18.94                       | 39,395                 |
| Bookkeeper                      | 2080                          |                                 | 17.45                       | 36,296                 |
| Office Admin Asst               | 2080                          | 8                               | 15.40                       | 32,217                 |
| CSR                             | 2080                          | 7                               | 10.71                       | 22,389                 |
| CSR                             | 2080                          | 25                              | 12.46                       | 26,384                 |
| CSR                             | 2080                          | 27                              | 11.52                       | 24,428                 |
| Payment Clerk                   | 2080                          | 17                              | 11.49                       | 24,192                 |
| Payment Clerk                   | 1016                          | 8                               | 10.43                       | <u>10,722</u>          |
| Pro Forma Salaries and Wages    |                               |                                 |                             | 536,736                |
| Less: Test Year Expense         |                               |                                 |                             | <u>630,771</u>         |
| Increase(Decrease) to Test Year |                               |                                 |                             | <u>\$ (94,035)</u>     |

As a result of Staff reduction to Salaries and Wages – Employees, Staff has made an adjustment to reduce FICA Tax Expenses to reflect the reduced payroll tax costs, as shown below.

|                                |                    |
|--------------------------------|--------------------|
| Pro Forma Salaries and Wages   | \$ 536,736         |
| Multiply by: FICA Rate         | <u>7.65%</u>       |
| Pro Forma FICA Taxes           | 47,353             |
| Less: Test Year Payroll Taxess | <u>(57,726)</u>    |
| Adjustment                     | <u>\$ (10,373)</u> |

D. Employee Pensions and Benefits. Madison District included \$259,835 in its test-year Employee Benefits Expense related to insurance and retirement benefits. As part of its employee compensation, Madison District pays approximately 83.57 percent of

its employee's single coverage health insurance premiums as well as life insurance. Madison District does not pay premiums for employee's family or additional insurance benefits.

Staff notes that the Commission has consistently made ratemaking adjustments to reduce the cost of employer-sponsored healthcare paid by some utilities when certain aspects of those benefit packages were found to be unreasonable based on a review of total salaries and fringe benefits. The Commission continues to place greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs, for market and geographic competitiveness to ensure the development of a fair, just and reasonable rate.<sup>14</sup>

In Commission Case No. 2019-00053, the Commission found it necessary to establish a policy delineating when a utility's employees' insurance contribution levels are sufficient to avoid Commission adjustment of the contributions to the national average. In the Final Order of Case No. 2019-00053, the Commission determined that if a utility's employees' health insurance contribution is greater than 12 percent, no adjustment will be made.<sup>15</sup> As Madison District's employees currently pay 16.43 percent of their health insurance premiums, Staff has not made any adjustment to employee health insurance benefits beyond normalizing them to 2021 pro forma levels, as shown below.

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<sup>14</sup> Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 3, 2020). Case No. 2020-00296, *Electronic Application of Allen County Water District for an Alternative Rate Adjustment* (Ky. PSC Feb. 3, 2021).

<sup>15</sup> Case No. 2019-00053, *Electronic Application of Jackson Purchase Energy Corporation for a General Adjustment in Existing Rates* (Ky. PSC June 20, 2019).

|                                   |                       |
|-----------------------------------|-----------------------|
| Monthly Health Insurance Premiums | \$ 9,872              |
| Monthly Life Insurance Premiums   | <u>95</u>             |
| Total Monthly Insurance Premiums  | <u>9,967</u>          |
| Multiply by: 12 Months            | <u>12</u>             |
| Pro Forma Insurance Benefits      | <u><u>119,600</u></u> |

In addition to health and life insurance, Madison District employees participate in Kentucky's County Employee Retirement System (CERS). As part of CERS, Madison District makes contributions to employee's retirement account based on annual salaries and wages. Using the pro forma Salaries and Wages – Employees Expense discussed above, Staff normalized annual contributions using the CERS rate effective July 1, 2021, of 26.95 as shown below.

|   |                          |
|---|--------------------------|
| Pro Forma Salaries and Wages                  | \$ 536,736               |
| Multiply By: Pro Forma CERS Contribution Rate | <u>26.95%</u>            |
| Pro Forma CERS Contributions                  | <u><u>\$ 144,650</u></u> |

Taking into account both adjustments discussed above, Staff finds that pro forma Employee Benefits Expense should be increased from \$259,835 by \$4,415 to a Pro Forma total of \$264,250 as shown below.

|  |                        |
|--|------------------------|
| Pro Forma Insurance Benefits           | \$ 119,600             |
| Pro Forma CERS Contributions           | <u>144,650</u>         |
| Pro Forma Pension and Benefits Expense | 264,250                |
| Less: Test Year Pensions and Benefits  | <u>(259,835)</u>       |
| Adjustment                             | <u><u>\$ 4,415</u></u> |

E. Miscellaneous Expense. Per Madison District's 2020 Annual Report, Madison District reported a Miscellaneous Expense of \$286,010. In the course of Staff's review of Madison District's General Ledger, Staff found that the Miscellaneous Expense line item contained a high number of expenses that should be classified more acutely and was understated by \$45,913. Accordingly, Staff has increased Pro Forma Miscellaneous Expense by \$45,913. In addition, Staff has made a number of adjustments to reclassify certain line items included in Miscellaneous Expense for the purpose of clarity in review of its financial health, which are shown individually in Appendix B to this report.

F. Depreciation Expense. In its application, Madison District proposed to include test-year Depreciation Expense of \$554,893. To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the National Association of Regulatory Utility Commissioners' (NARUC) report titled *Depreciation Practices for Small Utilities* (NARUC Study) published in 1979. When no evidence exists to support a specific life that is outside the NARUC ranges, the Commission has historically used the midpoint of the NARUC ranges to depreciate the utility plant.

Upon examination, Staff found several assets whose useful lives were not the NARUC ranges midpoints. In this proceeding, Staff found no evidence to support depreciable lives that vary significantly from the midpoint of the NARUC ranges. After further review of Madison District's plant ledger, Staff decreased Madison District's Depreciation Expense by \$70,931 to \$483,962 as shown below.

| <u>Asset</u>                       | <u>Cost</u> | <u>NARUC Life</u> | <u>NARUC Depreciation</u> |
|------------------------------------|-------------|-------------------|---------------------------|
| Vehicles                           | 112,154     | 7                 | 16,022                    |
| Communication Equipment            | 344,030     | 10                | 34,403                    |
| Power Operated Equipment           | 69,105      | 12.5              | 5,528                     |
| Water Tank Rehabilitation/Painting | 236,941     | 15                | 15,796                    |
| Tools, Shop, & Garage Equipment    | 34,138      | 17.5              | 1,951                     |
| Pumping Equipment                  | 260,032     | 20                | 13,002                    |
| Office Furniture & Equipment       | 58,549      | 22.5              | 2,602                     |
| Structures & Improvements          | 641,044     | 37.5              | 17,095                    |
| Services                           | 190,432     | 40                | 4,761                     |
| Meters                             | 2,196,167   | 40                | 54,904                    |
| Meter Installations                | 1,531,922   | 45                | 34,043                    |
| Reservoirs & Tanks                 | 2,917,893   | 50                | 58,358                    |
| Hydrants                           | 370,196     | 50                | 7,404                     |
| Mains                              | 13,630,869  | 62.5              | 218,094                   |
|                                    |             |                   | <u>483,962</u>            |
|                                    |             |                   | <u>(554,893)</u>          |
|                                    |             |                   | <u>(70,931)</u>           |

**OVERALL REVENUE REQUIREMENT AND  
REQUIRED REVENUE INCREASE**

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of Utilities Districts and water associations. This method allows for recovery of (1) cash-related pro forma operating expenses; (2) recovery of depreciation expense, a non-cash item, to provide working capital;<sup>16</sup> (3) the average

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<sup>16</sup> The Kentucky Supreme Court has held that the Commission must permit a Utilities District to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Although a Utilities District's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the Utilities District's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

annual principal and interest payments on all long-term debts; and (4) working capital that is in addition to depreciation expense.

|   | Madison<br>District | Staff              |
|---|---------------------|--------------------|
| Operating Expenses                              | \$ 5,477,970        | \$ 4,731,209       |
| Add: Average Annual Debt Principal and Interest | 583,374             | 696,571            |
| Additional Working Capital                      | <u>692,511</u>      | <u>139,314</u>     |
| Overall Revenue Requirement                     | 6,753,855           | 5,567,094          |
| Less: Other Operating Revenue                   | (188,095)           | (99,835)           |
| Investment Income                               | <u>-</u>            | <u>(56,719)</u>    |
| Revenue Requirement - Water Rates               | 6,565,760           | 5,410,540          |
| Less: Normalized Revenue from Service           | <u>(4,833,323)</u>  | <u>(4,833,323)</u> |
| Required Revenue Increase                       | <u>\$ 1,732,437</u> | <u>\$ 577,217</u>  |
| Percentage Increase                             | <u>35.84%</u>       | <u>11.94%</u>      |

Madison District failed to include other operating income such as investment income of \$56,719 in the revenue requirement calculation included in its application as well as included Other Operating Revenue associated with billing services performed for other utilities and nonrecurring charges, discussed above, leading to a total of \$188,095, \$88,260 above Staff's Adjusted Pro Forma Total. In addition, there was no supporting document showing the calculation of the Average Annual Debt Principal and Interest; therefore, Staff calculated its number based on the district's most recent Audit Report,<sup>17</sup> as calculated below. Finally, the calculation for Additional Working Capital was misapplied leading to a greatly increased number. Staff's corrected calculation is shown below.

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<sup>17</sup> *Audit Report of Madison County Utilities District to the Public Service Commission for the Calendar Year Ended December 31, 2020* at 15.

1. Average Annual Principal and Interest Payments. At the time of Staff's review, Madison District had four outstanding Kentucky Infrastructure Authority (KIA) loans and one series of revenue bonds issued through the Bank of New York/Mellon Trust. In its application, Madison District requested recovery of the average annual principal and interest on its indebtedness based on a three-year average of the annual principal, and interest and fee payments for the years 2020 through 2022.<sup>18</sup> Staff agrees with the methodology Madison District proposes. As shown in below, Staff calculated an Average Principal and Interest Payment of \$696,571.

| <u>Year</u>                   | <u>Principal</u> | <u>Interest</u> | <u>Total</u>      |
|-------------------------------|------------------|-----------------|-------------------|
| 2020                          | \$614,124        | \$81,156        | \$ 695,280        |
| 2021                          | 633,313          | 64,275          | 697,588           |
| 2022                          | 650,534          | 46,311          | <u>696,845</u>    |
| 3-Year Total                  |                  |                 | 2,089,713         |
| Divide By: 3 Years            |                  |                 | <u>3</u>          |
| Average Debt Service Coverage |                  |                 | <u>\$ 696,571</u> |

2. Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt payments. In its application, Madison District requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments for its long term debt with the KIA at the time of its application.

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<sup>18</sup> Application, Revenue Requirement Calculation.

KIA requires that Madison District charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission’s historic practice, \$139,314 is included it in the revenue requirement.

|                               |     |                   |
|-------------------------------|-----|-------------------|
| Annual Debt Service Payments  |     | 696,571           |
| Multplied by:                 | 20% | <u>1.20</u>       |
| Required Net Revenues         |     | 835,885           |
| Less: Annual Debt Service     |     | <u>(696,571)</u>  |
| Allowance for Working Capital |     | <u>\$ 139,314</u> |

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Signatures

/s/ Travis Leach\_\_\_\_\_

Prepared by: Travis Leach  
Revenue Requirements Branch  
Division of Financial Analysis

/s/Eddie Beavers\_\_\_\_\_

Prepared by: Eddie Beavers  
Rate Design Branch  
Division of Financial Analysis

APPENDIX A

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2021-00218 DATED DEC 03 2021

Monthly Water Rates

All Customers

|       |                    |         |                |
|-------|--------------------|---------|----------------|
| First | 280 Cubic Feet     | \$19.23 | Minimum Bill   |
| Next  | 720 Cubic Feet     | \$.0612 | Per Cubic Foot |
| Next  | 3,000 Cubic Feet   | \$.0588 | Per Cubic Foot |
| Next  | 8,000 Cubic Feet   | \$.0566 | Per Cubic Foot |
| Next  | 88,000 Cubic Feet  | \$.0545 | Per Cubic Foot |
| Over  | 100,000 Cubic Feet | \$.0510 | Per Cubic Foot |

Nonrecurring Charges

|                                   |          |
|-----------------------------------|----------|
| Meter Re-reading Check Charge     | \$22.00  |
| Meter Test Charge                 | \$61.00  |
| Meter Drop Charge                 | \$151.00 |
| Reconnection Charge               | \$20.00  |
| Reconnection Charge (After Hours) | \$51.00  |
| Returned Check/Bank Draft Charge  | \$17.00  |
| Service Call Charge               | \$20.00  |
| Service Call Charge (After Hours) | \$51.00  |

APPENDIX B

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2021-00218 DATED DEC 03 2021

|  |    |                |
|--|----|----------------|
| Bad Debt Expense   | \$ | 6,474          |
| Entertainment and Meals  |    | 352            |
| Janitor Service  |    | 370            |
| Misc   |    | 1,702          |
| Travel   |    | 1,536          |
| Continuing Education   |    | 500            |
| Uniforms   |    | <u>2,600</u>   |
| Total Miscellaneous Expense  | \$ | <u>13,534</u>  |
| Repairs and Maintenance  | \$ | <u>78,507</u>  |
| Supplies   | \$ | 3,998          |
| Equipment Rental   |    | <u>230</u>     |
| Total Materials and Supplies Expense   | \$ | <u>4,228</u>   |
| FICA   | \$ | 47,353         |
| Unemployment - State   |    | <u>657</u>     |
| Total Taxes Other Than Income  | \$ | <u>48,010</u>  |
| Postage  | \$ | 57,015         |
| Computer Service   |    | 46,583         |
| Office Expense   |    | <u>36,627</u>  |
| Total Office Expense   | \$ | <u>140,225</u> |
| Dues and Subscriptions   | \$ | 6,391          |
| Fees on Collections  |    | 1,211          |
| Licenses and Taxes   |    | 11,443         |
| KIA Annual Fee   |    | <u>7,125</u>   |
| Total Dues, Fees, and Taxes  | \$ | <u>26,170</u>  |
| Professional Fees  | \$ | 7,728          |
| Water Samples and Test   |    | <u>1,914</u>   |
| Adjustment to Contractual Services - Other   | \$ | <u>9,642</u>   |
| Meter Readers  | \$ | <u>11,607</u>  |
| Removed as it should be classified in Salaries & Wages which has already been normalized |    |                |

\*Madison County Utilities District  
297 Michelle Drive  
P. O. Box 670  
Richmond, KY 40476-0670

\*Honorable Jud Patterson  
Attorney at Law  
Luxon & Patterson  
507 Hampton Way  
P. O. Box 825  
Richmond, KENTUCKY 40476-0825